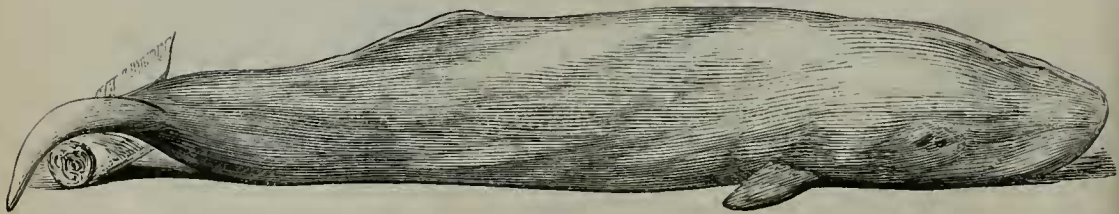


13. NOTICE OF A NEW SPECIES OF SPERM-WHALE BELONGING TO THE GENUS EUPHYSETES OF MACLEAY. BY GERARD KREFFT, CURATOR AND SECRETARY, AUSTRALIAN MUSEUM, SYDNEY, CORR. MEMB. ZOOL. SOC.

On Monday last, information reached me that a "Colt Whale" had been stranded at Manly Beach; and suspecting that it might be *Euphysetes grayii*, of which this Museum is in possession of the original skeleton, I immediately repaired to the spot, and found my supposition verified, as far as I could then judge, the toothless upper jaw, and the long, sharp-pointed, hook-like teeth of the lower jaw leaving no doubt in my mind as to the genus. With a view of exhibiting this rare visitor, some of the fishermen had carried the animal into a dark shed, strongly objecting to its removal for the purpose of photographing it. It was measured, with the following results:—

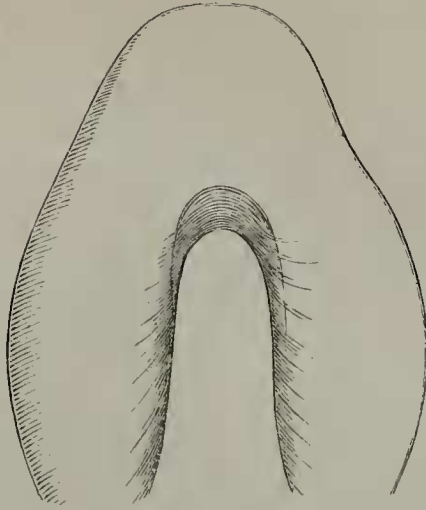
	ft.	in.
Total length	10	8
Breadth of tail	2	8½
Pectoral fin.....	1	7
Around body behind paddles.....	6	2
————— the eye.....	5	1
Before dorsal fin, or hump	5	3

Fig. 1.



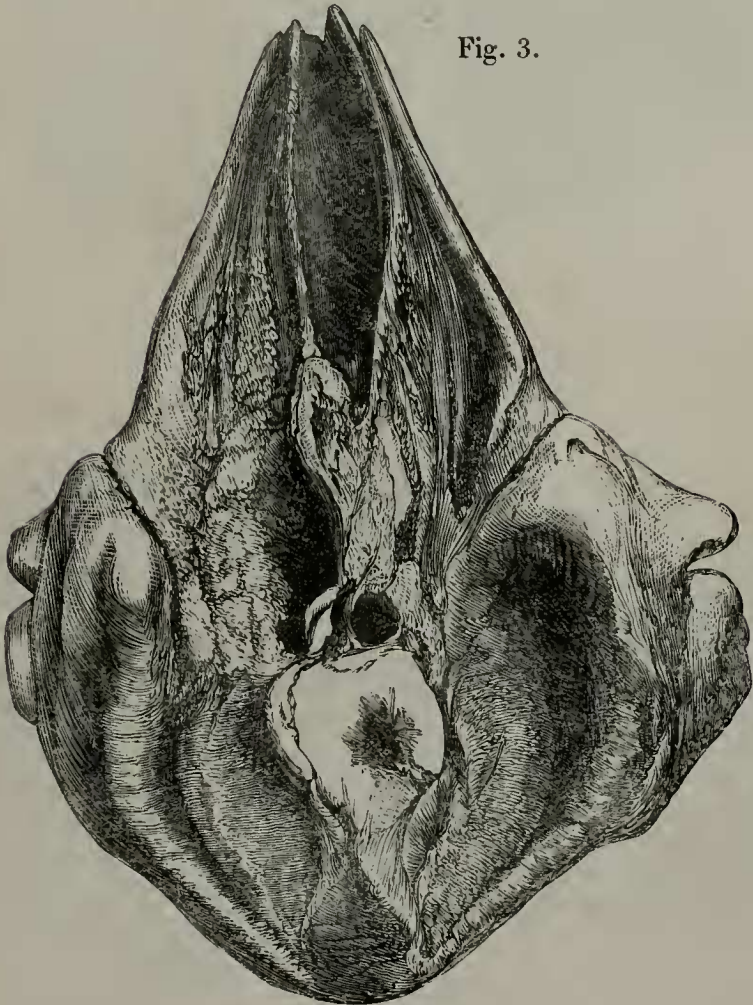
Colour black, yellowish beneath. The head is short and thick, rather broad, and the snout receding somewhat, like that of a shark (fig. 2). The mouth is small, the upper jaw toothless; but after removing the flesh two rows of holes, communicating with each other more or less, were observed; and I believe that teeth were probably imbedded therein at the time of birth, and subsequently shed. This, of course, is only surmise; but as no holes were noticed when flesh covered the gums, the holes could not be for the reception of the teeth in the lower jaw. Looking at the skull from above, it shows at first a remarkable resemblance to that of *Euphysetes grayii*, MacLeay, but the sides of the spermatic cavity, so sharp in Gray's Whale, are rounded off in the present species; and the blow-hole, which is fully 1½ inch in diameter in Gray's animal, is not quite an inch in the new one. The ridge dividing the cavity in this new Whale is almost formed into ivory, and many spots of the same substance are im-

Fig. 2.



Snout (from below).

Fig. 3.



Skull (from above).

bedded here and there in the less hard, darker, and porous bone. The lower jaw also much resembles that of Gray's Whale; but the sides are not so thin; the teeth are longer, stronger, and curved backwards, instead of standing out sideways. The rami in Gray's Cetacean are not much thicker than parchment. The teeth of the present species are thirteen in number in each ramus, the first three being almost straight, the next four gently curved backwards, and the last six almost hook-like. The seventh tooth, which is about half broken, is apparently the longest and strongest of the set.

If people only knew how valuable complete specimens of animals are to the naturalist, they would certainly not mutilate them as they often do; for had it not been for Mr. Skinner, who secured this Whale, all the teeth would have been knocked out to be made into "charms" for watch-chains.

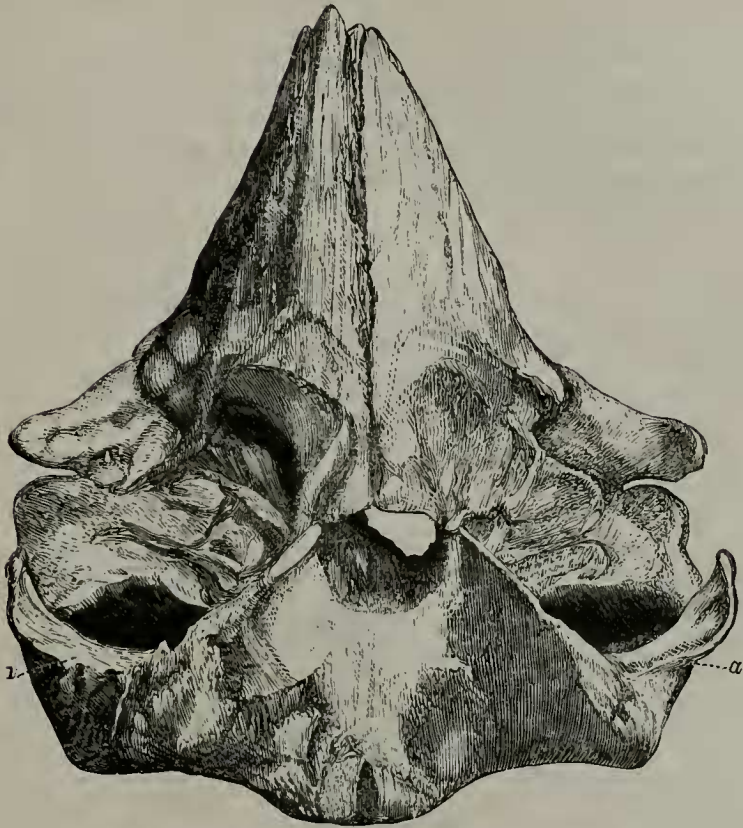
The spinal column consists of the anchylosed cervicals, thirteen dorsal, nine lumbar, and twenty-six caudal vertebræ, the first ten of which have V-bones attached to them. All the vertebræ are considerably larger and much more porous than those of *E. grayii*, the neurapophyses being very broad at the top. The total width of the atlas is 6 inches, its greatest vertical height $5\frac{1}{2}$ inches, and length or thickness $2\frac{1}{4}$ inches; this bone is so spongy that in holding it against the light one can see clear through the pores of the neurapophysis as through a sieve. There are thirteen ribs on each side, differing but slightly in length, as the following table will show:—

<i>Right Side.</i>		<i>Left Side.</i>	
	in.		in.
1	15	1	$15\frac{1}{2}$
2	22	2	22
3	25	3	25
4	26	4	$26\frac{1}{2}$
5	$25\frac{1}{2}$	5	$25\frac{3}{4}$
6	$24\frac{3}{4}$	6	25
7	$23\frac{1}{2}$	7	$23\frac{1}{2}$
8	22	8	22
9	19	9	$18\frac{1}{2}$
10	17	10	17
11	16	11	16
12	$11\frac{1}{2}$	12	12
13	$3\frac{1}{2}$	13	4

The respective weight of the two sides is—Right side, 5 lbs. 9 ozs.; Left side, 5 lbs. 8 ozs. Not one of these ribs is grooved like the eighth, ninth, and tenth in Gray's Whale. In shape they differ both from *Catodon* and from *Euphysetes grayii*, being rather rounder at the upper half, and becoming flat towards the end; the outside edges are strongly marked with a series of knobs or protuberances, which in the ninth and tenth are strongest. The sixth, seventh, eighth, and ninth ribs suddenly diminish in width about 6 inches from the end, after producing a sharp protruding ridge.

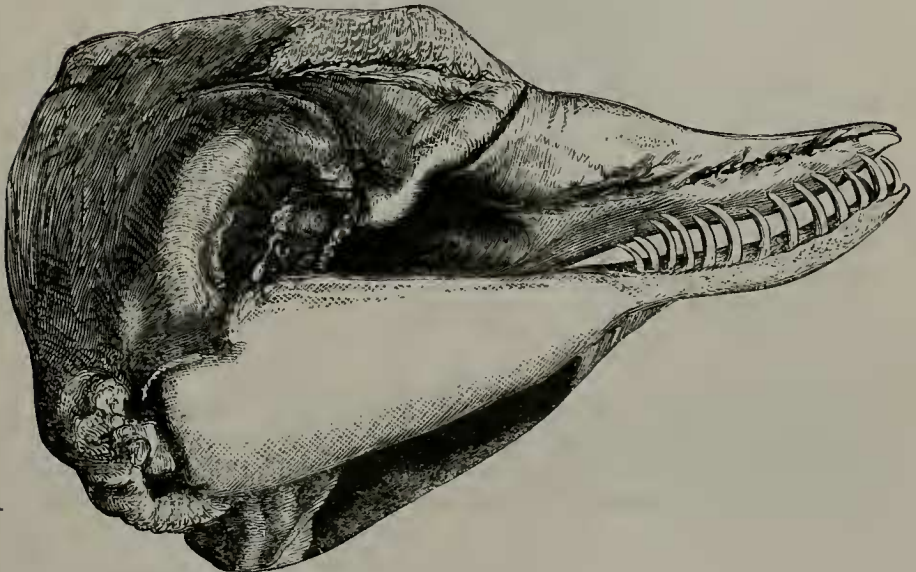
The scapular, the hyoid bones, the sternum, and the pectoral fins

Fig. 4.



Skull (from below).

Fig. 5.

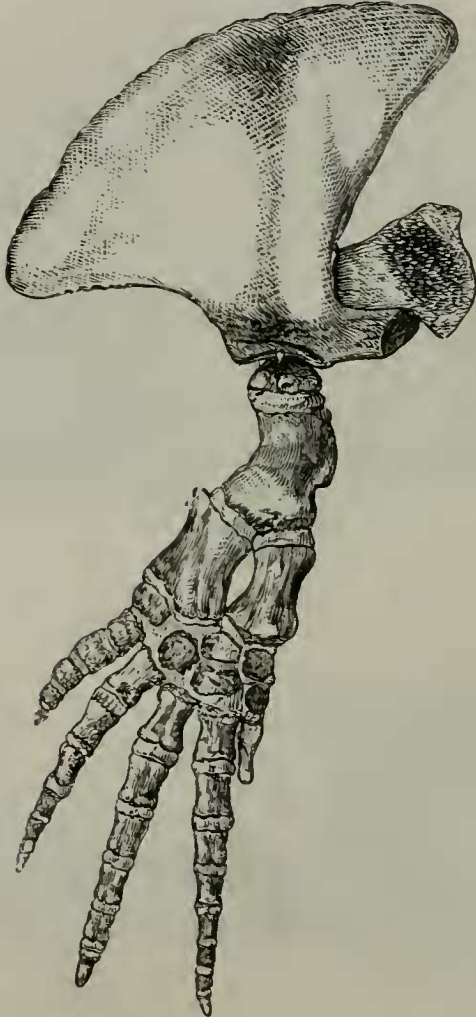


Skull (side view).

differ considerably from the corresponding parts in Gray's Whale ; but these parts not being macerated, I shall give a full description of them at a future time.

The length of the spinal column is 7 feet 4 inches without cartilage ; the head measures 18 inches, making a total of 8 feet 10 inches ; the cartilage is very thick in some places, so that at least 1 foot 6 inches should be allowed for it ; and the total length of the skeleton, when articulated, will therefore be 10 feet 4 inches.

Fig. 6.



I believe that I have proved that this Whale is different from the *Euphysetes grayii* of MacLeay ; and I only regret that the great mind which established the genus is no more. Nothing would have given me more pleasure than to have seen this animal (which will

yield perhaps the most complete skeleton of a Cetacean ever discovered) described by William Sharp MacLeay. As it is, my feeble efforts must suffice; and being under deep obligations to the greatest naturalist Australia ever had, I wish to pay a slight tribute to his memory by proposing the name of *Euphysetes macleayi* for this new species.

DESCRIPTION OF THE FIGURES

(taken from the photographs forwarded by Mr. Krcfft).

- Fig. 1. Outline of the whole animal.
 2. Snout seen from below.
 3. Upper surface of skull.
 4. Under surface of skull.
 5. Side view of skull, showing teeth *in situ*.
 6. Bones of the pectoral limb. (Added from a photograph received subsequently to the original communication.)

14. ON A SUPPOSED NEW SPECIES OF FIN-WHALE FROM THE COAST OF SOUTH AMERICA. BY DR. H. BURMEISTER, FOR. MEMB.*

I now send you the drawing of a bladebone of another species of Whale, which I received a few days since from a friend of mine for our Museum. The bone is taken from a skeleton of an animal cast on shore on the coast of the Samboramban Basin, near the mouth of the river Salado, to the south of Buenos Ayres; but as the people in the vicinity found that the vertebræ were very good to make chairs for their houses, they cut off the spines, and brought home only the bodies; each of them is said to be $1\frac{1}{2}$ foot high. This bladebone was sent by the keeper of the farm there to the owner in Buenos Ayres, who has promised me to write immediately to his officer to send all the bones not yet broken to Buenos Ayres, when I hope I shall be able to send you further information. But the skull is said to be already entirely broken up and destroyed.

The bladebone is of an enormous size; and therefore I thought, before I had seen it, that it might belong to a true *Balæna*; but now that it is in my hands I find that it must belong to a Fin-Whale, because it is much broader than high. As you say in your paper that *Megaptera* has no coracoid process, or has only a very small one, this bladebone cannot belong to that genus; and therefore I suppose, from the enormous size, it may be that of a species of *Sibbaldius*, to which genus belong the largest Balænopteriidæ. It seems to be an unknown species, and, as I find no mention in your papers of such a Whale in this part of the southern hemisphere, I propose the name of *Sibbaldius antarcticus* for it; but you may change the name if you believe another more convenient.

I give you the description of the bone. It is mostly flat, and has the general figure of the third part of a circle, being half as high as broad. The outer margin is regularly curved, with an indication of

* Extracted from a letter addressed by the author to Dr. J. E. Gray.